PSA Series Smart Switch Module

Overview

PSA series is a high integration and general-purpose smart switch module designed for wifi socket and wifi switch. With peripheral circuit like external power supply, relay, button accessing, manufactures can make use of this module to develop and produce smart socket or smart switch without any coding. PSA series module is capable of auto-searching and auto-connecting wifi, communicating with cloud server, being control by phone APP etc. PSA series includes several models, each of them supports different servers and different smartphone end APPs.

Functions

- Support easy configure SSID and wifi password through phone APP
- Support auto-connecting to IoTgo server, register product and update status
- Support remote monitor and control by phone APP
- Support setting timing task by phone APP (once or repeat is optional)

Features

- Mini size, easy to installed into any shell
- External antenna/ceramic antenna (optional)
- High integration, no coding need

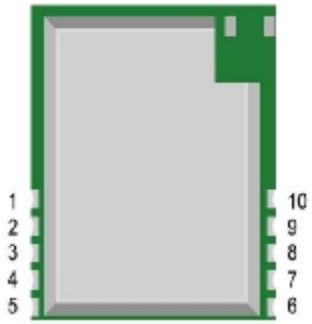
Specification

PCB Size	22.86 x 20.32 x 1.0mm
Power supply	3.3V

Electrical Characteristics

Characteristics	Symbol	Min	Typ	Max	Unit
Power supply voltage	VDD	3	3.3	3.5	V
High input voltage	VIH	0.8XVDD	-	VDD	V
Low input voltage	VIL	0	-	0.2XVDD	V
Operation current for VDD	IDD	-	-	215	mA

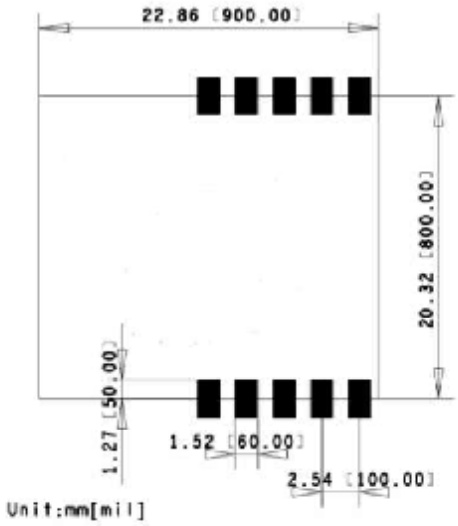
Pin Map



Pin Index	Pin Name	Description
1	NC	No connection
2	RELAY	Connect to relay. To turn on and off the switch.
3	SLED	Net Status Indicators ● Stay ON – normal work ● Repeat ON 100ms, OFF 1900ms – cannot connect to WiFi spot ● Repeat ON 100ms, OFF 100ms, ON 100ms, OFF 1700ms - cannot connect to server ● Repeat ON 100ms, OFF 1000ms – device connects to server, but doesn't register to the corresponding account in server ● Repeat ON 100ms, OFF 100ms – enter into SSID configuration mode
4	NC	No connection
5	KEY	Local switch button - use for turning on and off the socket or switch Take effect when Low, default input is High Long press (more than 5s), enter into the configure mode Change the status of switch by pressing
6	3V3	Module power pin
7	NC	No connection
8	NC	No connection
9	GND	Module power pin
10	NC	No connection

Layout Guide

Module Dimension



Schematic & Design files can be downloaded at psa.itead.cn

Support APP Download and Directions

1. Login and click “Add device”
2. Auto-searching module, and configure WiFi hot spot for the module
3. Name your device and submit
4. Device added successfully
5. Device status sync to your App
6. Set timing to control device

* Beta Android App download - http://iotgo.itead.cn/android.apk
* Official Android/IOS app download, please contact to ITEAD
* English Version will release soon

Models List

	PSA-CN series	PSA-US series	PSA-EU series	PSA-JD series	PSA-QQ series
Server	Chinese server	US server	German server	JD+	QQ IoT
App	Chinese app	English app	English app	JD Super app	QQ / Wechat

Value-added Service

*Baseboard Customization

ITEAD has developed hundreds of baseboards to carry various SoMs. According to customer actual needs, we can design and develop the custom baseboard of PSA series module. The custom baseboard can be embedded in your products without your any extra labor and time. We charge the hardware design fee, but the design fee will be favorable if customer purchases in bulk. Design fee will be even free if purchase quantity exceeds a certain amount.

- We provide a free open-source reference design.

*Brand APP Customization

If customer needs a brand app to control your product with PSA module embedded, we will design the exclusive custom APP for your brand according to your requirements. The custom APP will definitely increase your brand awareness. Certainly, we charge the APP design fee, but the design fee will be favorable if customer purchases in bulk. Design fee will be even free if purchase quantity exceeds a certain amount.

- We provide a free app for module users.

*Could Server Device Monitor

We can provide a custom monitor server for our customers. So customer can check the active products number, register number, and products online status. The monitor allows customers to send some promotional messages to users end. If customer needs server custom service, it will charge you server development fee and monthly maintenance fee.

- Now, the server we provide for customer is free, and guarantees all devices in server running normally but the monitor right not accessible.

Note: This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

FCC Caution: Any changes or modifications not expressly
approved by the party responsible for compliance could void the user's
authority to operate this equipment.
This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions: (1) This device may not
cause harmful interference, and (2) this device must accept any interference
received, including interference that may cause undesired operation.
This device and its antenna(s) must not be co-located or operating in conjunction
with any other antenna or transmitter.
15.105 Information to the user.
(b) For a Class B digital device or peripheral, the instructions furnished the
user shall include the following or similar statement, placed in a prominent
location in the text of the manual:
Note: This equipment has been tested and found to comply
with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful
interference in a residential installation. This equipment generates, uses and
can radiate radio frequency energy and, if not installed and used in
accordance with the instructions, may cause harmful interference to radio
communications. However, there is no guarantee that interference will not
occur in a particular installation. If this equipment does cause harmful
interference to radio or television reception, which can be determined by
turning the equipment off and on, the user is encouraged to try to correct the
interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which
the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.
This equipment complies with FCC radiation exposure limits set forth for an uncont
rolled environment. This equipment should be installed and operated with minimum
distance 20cm between the radiator and your body.

Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an
uncontrolled environment.
This transmitter must not be co-located or operating in conjunction with any other
antenna or transmitter.
The availability of some specific channels and/or operational frequency bands
are country dependent and are firmware programmed at the factory to match
the intended destination.
The firmware setting is not accessible by the end user.
The final end product must be labelled in a visible area with the following:
“Contains Transmitter Module 2AE2JPSA-B”